UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,810	04/09/2004	Yasuko Watanabe	12732-227001	8884

26171 7590 10/04/2006

FISH & RICHARDSON P.C.
P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER	
GOINS, DAVETTA WOODS	
ART UNIT	PAPER NUMBER
2612	

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/820,810	WATANABE ET AL.	
	Examiner	Art Unit	
	Davetta W. Goins	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *4/04,7/04,9/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-6 and 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsunoda et al. (US Pat. 5,064,275) in view of Kamijima et al. (US Pat. 7,088,417 B2).

In reference to claims 1, 2, 5, 6, Tsunodo discloses a) the claimed substrate having a mirror surface, which is met by substrate 11 of a liquid crystal display device 10 including a reflector 3 (col. 7, lines 11-30) and b) the claimed display means over the substrate having a mirror surface, which is met by liquid display panel 1 having a large display area formed by assembling a plurality of liquid crystal devices 10 (col. 7, lines 1-30). Although Tsunoda does not specifically disclose the claimed plurality of light-emitting elements each having a luminescent material sandwiched between a pair of electrodes having light-transmittivity are arranged in the display means, he does disclose a plurality of light emitting devices 9 that are placed along a substrate 11. The display device will activate the light emitting devices 9a, which will produce an optical beam which hits the corresponding optically activated switch 16a and the switch 16a is turned on. When the switch 16a is turned on, the scanning signal on the scanning signal bus 17a is supplied to an electrode 12a to which the switch 16a activated by the optical beam is connected. Similarly, when one of the light emitting devices 9b is selectively

activated, it produces an optical beam which hits the corresponding optically activated switch 16b and the switch 16b is turned on creating a video display for the device 10 (col. 7, lines 11-68; col. 8, lines 1-56). Kamijima discloses an EL element 203 is a light-emitting element having a structure in which an EL layer containing a luminescent layer is held between an anode and a cathode. In FIG. 25, each of pixel electrodes 246 is shown as a substantially rectangular anode, and an EL layer 247 containing the luminescent layer is laminated on the pixel electrode 246 (col. 30, lines 44-64). Since Tsunoda discloses a liquid crystal display that includes a pair of electrode surfaces that operate with a plurality of light emitting devices, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of sandwiching the light-emitting elements between a pair of electrodes as well as providing a luminescent material for each of the light-emitting elements, as disclosed by Kamijima, to ensure that the image is displayed on a selected pixel in a selected line as well as enhancing reliability with the luminescent material.

In reference to claims 3, 4, Tsunoda discloses a) the claimed substrate having a mirror surface, which is met by substrate 11 of a liquid crystal display device 10 including a reflector 3 (col. 7, lines 11-30), b) the claimed display means over the substrate having a mirror surface, which is met by liquid display panel 1 having a large display area formed by assembling a plurality of liquid crystal devices 10 (col. 7, lines 1-30), and c) the claimed plurality of photovoltaic conversion elements are arranged in the image sensing means, which is met by liquid crystal display devices of FIG. 2 and FIG. 3 may use a photovoltaic device such as a light activated SCR which is triggered responsive to the optical beam having a wavelength in the invisible

region in place of the optically activated devices (col. 11, lines 19-29). Although Tsunoda does not specifically disclose the claimed plurality of light-emitting elements each having a luminescent material sandwiched between a pair of electrodes having light-transmittivity are arranged in the display means, he does disclose a plurality of light emitting devices 9 that are placed along a substrate 11. The display device will activate the light emitting devices 9a, which will produce an optical beam which hits the corresponding optically activated switch 16a and the switch 16a is turned on. When the switch 16a is turned on, the scanning signal on the scanning signal bus 17a is supplied to an electrode 12a to which the switch 16a activated by the optical beam is connected. Similarly, when one of the light emitting devices 9b is selectively activated, it produces an optical beam which hits the corresponding optically activated switch 16b and the switch 16b is turned on creating a video display for the device 10 (col. 7, lines 11-68; col. 8, lines 1-56).

In reference to claims 19-24, Tsunoda does not specifically disclose the claimed display device is applied to an electronic device selected from the group consisting of a portable terminal and a PDA. Kamijima discloses a display system that can be used for a cellular phone, electrooptic device of the present invention can be applied include a liquid crystal television, a viewfinder-type video tape recorder, a monitor direct-viewing-type video tape recorder, a car navigation device, a pager, an electronic notebook, an electric calculator, a word processor, a work station, a picture phone, a POS terminal, a digital still camera, and the like (col. 22, lines 22-30). Since it is known to use liquid crystal displays for PDAs and/or other electronic devices, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate

the teaching of using the display for a PDA, as disclosed by Kamijima, to provide a well lit display that can be viewed by a user for any type of portable electronic devices that's used on a regular basis.

3. Claims 7-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsunoda et al. in view of Kamijima as applied to claims 1-6 above, and further in view of Kaspar et al. (US Pat. 5,631,638).

In reference to claims 7-18, Tsunoda does not specifically disclose the claimed display device is used as a side-view mirror for vehicle. Kamijima discloses a display system that can be used for a cellular phone, electrooptic device of the present invention can be applied include a liquid crystal television, a viewfinder-type video tape recorder, a monitor direct-viewing-type video tape recorder, a car navigation device, a pager, an electronic notebook, an electric calculator, a word processor, a work station, a picture phone, a POS terminal, a digital still camera, and the like (col. 22, lines 22-30). Kaspar discloses a display for a motor vehicle's rearview mirror comprising circuitry 10, a segment of electrodes 76, to provide a display shown on the mirror (col. 2, lines 26-67). Since it is known to use liquid crystal displays for vehicles placed behind a rear-view or side-view mirror, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of using the display for a vehicle's side-view mirror, as disclosed by Kasper, to provide a well lit and high definition display that can be easily viewed by a driver without any glare.

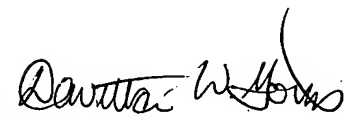
4. The prior art of record and not relied upon is considered pertinent to the applicant's disclosure as follows. Spitzer et al. (US Pat. 7,075,501 B1), which discloses a display system.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davetta W. Goins whose telephone number is 571-272-2957. The examiner can normally be reached on Mon-Fri with every other Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Davetta W. Goins
Primary Examiner
Art Unit 2612



D.W.G.
September 28, 2006